

Date: Tuesday, 1/3/2006 4:14:44 PM
 User: Kim Johnston

Process Sheet

SPLIT-1

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SADDLE BILLET
 Job Number : 25342 -1
 Estimate Number : 10032
 P.O. Number : N/A Part Number : D6101001
 This Issue : 1/3/2006 S.O. No. : N/A Drawing Number : D6101 REV A
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : A
 Previous Run : 24890 Material : N/A
 Written By : SEE COMMENT BELOW Due Date : 1/30/2006 Qty: 100 Um: Each
 Checked & Approved By : SEE ABOVE USE DART USER
 Comment : Est. B: 01.05.04 New Issue EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O: 00000339

AP 06/01/04

a) Description: Aluminum billet

b) 6.00" x 6.250" x 2.00" thick

c) Tolerance on length are +0.025"/-0.000" AE +/-0.008"

d) Grain direction along 6.00" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

P 06/11/25 (70)

3.0 QC6 DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D

BG 06-04-24 (69)

4.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CNC

BG 06-04-24 (69)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DP Date: 06/04/24
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/3/2006 4:14:45 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 25342

Part Number: D6101001

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

06/04/24 (69)

Job Completion



06/04/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

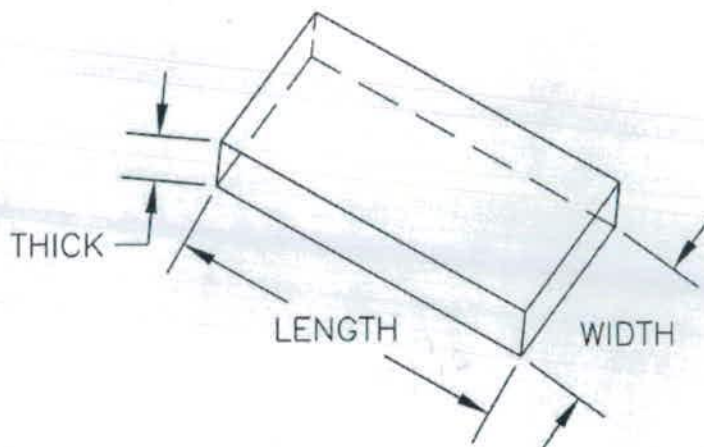
NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED [Signature]	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23 [Signature]



SHOP COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
[Stamp]

25342

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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SHIP TO: A M CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
SOLD TO: AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
CUSTOMER PO NUMBER: 01-81313	CUSTOMER PART NUMBER: 6857
KAISER ORDER NO: 1027007	LINE ITEM: 1
SHIP DATE: 15-DEC-2005	ALLOY: 7075
WEIGHT SHIPPED: 5764 LB	QUANTITY: 4 PCS EST.
B/L NUMBER: 206838	GAGE: 2.0000 IN
CLAD: BARE	TEMPER: T7351
WIDTH: 48.500 IN	LENGTH: 144.500 IN

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4055497

Certified Specifications

AMS 4078/RevF
ASTM B 209/Rev04
BSS 7055/RevA
GSS16100/RevG
PS 21211/RevJ

AMS-QQ-A-250/12
ASTM B 594/Rev02
CSTI 006/RevB
MIL-STD-2154

AMS-STD-2154
BAC 5439/RevH
DPS 4.713/RevN/AmdAF
MMS 159/RevN

Test Code: 4297

Test Results

Lot: 343361A2 Cast 861

Drop 54

Ingot 4

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	75.3 : 75.4 (519 : 520)	64.8 : 65.0 (447 : 448)	10.8 : 11.2

Conductivity %IACS :	40.0 Min	40.8 Max
(MS/M) :	23.2 Min	23.7 Max

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.11	0.25	1.54	0.04	2.54	0.20	5.85	0.04	0.01	0.01	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS FP
DATE REC'D 12.19.05 BY 6857
APPROVED BY: SW



KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4055497

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM & CHEMICAL CORPORATION (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM & CHEMICAL CORPORATION LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL FOYNOR, LABORATORIES SUPERVISOR





SHIP TO: A M CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131					
SOLD TO: AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131					
CUSTOMER PO NUMBER: 01-81488		CUSTOMER PART NUMBER: 6857		SHIPPING RUN #/LOAD ID: 100555/3	
KAISER ORDER NO: 1028643		LINE ITEM: 1		SHIP DATE: 15-DEC-2005	
WEIGHT SHIPPED: 7196 LB		QUANTITY: 5 PCS EST.		B/L NUMBER: 206838	
ALLOY: 7075		CLAD: BARE		TEMPER: T7351	
GAUGE: 2.0000 IN		WIDTH: 48.500 IN		LENGTH: 144.500 IN	

KAISER

ALUMINUM

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4055502

Certified Specifications

AMS 4078/RevF
 ASTM B 209/Rev04
 BSS 7055/RevA
 GSS16100/RevG
 PS 21211/RevJ

AMS-QQ-A-250/12
 ASTM B 594/Rev02
 CSTI 006/RevB
 MIL-STD-2154

AMS-STD-2154
 BAC 5439/RevH
 DPS 4.713/RevN/AmdAF
 MMS 159/RevN

Test Code: 4297

Test Results

Lot: 353507A7 Cast 869

Drop 03

Ingot 1

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	75.7 : 75.8 (522 : 523)	65.0 : 65.3 (448 : 450)	11.2 : 11.3

Conductivity %IACS :	40.6 Min	41.2 Max
(MS/M) :	23.5 Min	23.9 Max

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.16	1.55	0.02	2.58	0.22	5.74	0.03	0.01	0.01	TOT 0.01

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS FP
 DATE REC'D 12.19.05 IAC 6857
 APPROVED BY:

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4055502

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

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BILL POYNOR, LABORATORIES SUPERVISOR



